Iowa Department of Natural Resources
Draft Title V Operating Permit

Name of Permitted Facility: Iowa State University Power Plant
Facility Location: Wallace Road
Ames, Iowa
Air Quality Operating Permit Number: 00-TV-046R1
Expiration Date: May 5, 2013

Permit Renewal Application Deadline: November 5, 2012

EIQ Number: 92-2776
Facility File Number: 85-01-007

Responsible Official
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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section Date

Table of Contents

Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
°F.....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
EP.....emission point
EU .....emission unit
gr./dscf .....grains per dry standard cubic foot
gr./100 cf.....grains per one hundred cubic feet
IAC.....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification system
NSPS.....new source performance standard
ppmv .....parts per million by volume
lb./hr.....pounds per hour
lb./MMBtu .....pounds per million British thermal units
SCC.....Source Classification Codes
scfm.....standard cubic feet per minute
SIC .....Standard Industrial Classification
TPY.....tons per year
USEPA.....United States Environmental Protection Agency

Pollutants
PM.....particulate matter
PM_{10}.....particulate matter ten microns or less in diameter
SO_2.....sulfur dioxide
NO_x.....nitrogen oxides
VOC.....volatile organic compound
CO.....carbon monoxide
HAP.....hazardous air pollutant

Facility Description and Equipment List

Facility Name: Iowa State University Power Plant
Permit Number: 00-TV-046R1

Facility Description: Electric and Other Services Provider

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
S/(ss[1])	B1	Circulating Fluidized Bed Boiler	07-A-923-P
	B2	Circulating Fluidized Bed Boiler	
	B3	Spreader Stoker Boiler	
	B4	Spreader Stoker Boiler	
	B5	Chain Grate Stoker	
	B6	Chain Grate Stoker	
	B7	Chain Grate Stoker	
EP-1	EU-1	CFB Ash Transport	86-A-139
EP-2	EU-2	CFB Ash Storage Silo Vent	86-A-140
EP-3	EU3	Truck Loading - Dry CFB Ash	N/A (fugitive)
EP-4	EU4	CFB Wet Ash Mixer Vent	N/A (fugitive)
EP-5	EU5	Truck Loading Wet CFB Ash	86-A-141 (fugitive)
EP-20	EU-20	Front End Loader – CFB Coal Hopper	86-A-129 (fugitive)
EP-21	EU-21	CFB Coal Conveyor 01	86-A-132
EP-22	EU22A	CFB Drag Chain 2A (north)	86-A-133
	EU22B	CFB Drag Chain 2B (south)	86-A-134
	EU22C	Coal Silo 1 Loading	86-A-135
	EU22D	Limestone Silo 2	86-A-138-S1

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
		Loading	
	EU22E	Coal Silo 3 Loading	86-A-136
EP-30	EU30	Front End Loader – Stoker Coal Hopper	N/A (fugitive)
EP-30A	EU30A	Stoker Transfer House Fugitives	N/A (fugitive)
EP-31	EU31	Stoker Coal Bunker Loading	81-A-126-S1
EP-40	EU40A	Coal Storage Pile - Truck Unloading	86-A-130 (fugitive)
	EU40B	Coal Storage Pile Front end Loader Reclaim	86-A-131 (fugitive)
	EU40C	Coal Storage Pile - Wind Erosion	N/A (fugitive)
EP-50	EU50	Stoker Fly Ash Transport	79-A-023
EP51	EU51	Stoker Fly Ash Silo Vent	Grandfathered
EP-52	EU52	Truck Loading – Wet stoker Fly Ash	N/A (fugitive)
EP-53	EU53	Truck Loading – Dry Stoker Fly Ash	96-A-1261 (fugitive)
EP-68	EU68	Truck Loading – Wet Stoker Bottom Ash	02-A-498 (fugitive)
EP-80	EU80	Central Vacuum System	99-A-853
EP-90	EU90	Vehicle Traffic	N/A (fugitive)
EP-100	EU-100	Portable Diesel Generator	99-A-732

[1] There is also a short stack (EP ss) that all of the emission units and control equipment are connected to. The only difference between EP S and EP ss is the stack height. EP ss has a stack height of 199 ft. This stack shall only be used during inspection and/or maintenance of the tall stack (EP s). Prior to these activities, ISU shall notify the DNR Field Office and also visually monitor opacity levels during daytime hours using plant staff certified to Method 9. All of the applicable requirements for the boilers (i.e. emission limits, operating limits, recordkeeping, operating condition monitoring, etc.) apply when EP ss is used, with the exception of those requirements relating to the common stack (EP S) opacity monitor which was installed on EP S pursuant to Condition IV (D) of the EPA Region VII Order of August 24, 1976

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-10A	Limestone Truck Unloading - Pneumatic
EU-65A	Stoker Bottom Ash Transport – North Blower
EU-65B	Stoker bottom Ash Transport – South Blower
EU-66	Stoker Bottom Ash Silo Vent
EU-67	Truck Loading – Dry Stoker Bottom Ash
EU-70	Main Plant Cooling Tower
EU-71	Solvent Parts Washer
EU-75	Maintenance Welding

Plant-Wide Conditions

Facility Name: Iowa State University Power Plant
Permit Number: 00-TV-046R1

Permit conditions are established in accord with 567 Iowa Administrative Code Rule 22.108

Permit Duration

The term of this permit is: Five (5) years
Commencing on: May 6, 2008
Ending on: May 5, 2013

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, Iowa State University Power Plant is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, Iowa State University Power Plant shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

Emission Point Specific Conditions

Facility Name: Iowa State University Power Plant
Permit Number: 00-TV-046R1

Emission Point ID Number: S (tall stack) and SS (short stack)

Associated Equipment

Associated Emissions Unit ID	Emission Control Equipment ID Number	Emissions Control Equipment Description	Continuous Emissions Monitors ID Numbers
B1	BGH1	Pulse Jet Baghouse 1	OP1, S1, N12, C12, OPS
B2	BGH2	Pulse Jet Baghouse 2	OP2, S2, N12, C12, OPS
B3	P3 DC3	Electrostatic Precipitator Multiclone Dust Collector	OPS
B4	DC4 P4	Multiclone Dust Collector Electrostatic Precipitator	OPS
B5	DC5	Multiclone Dust Collector	OPS
B6	DC6	Multiclone Dust Collector	OPS
B7	DC7	Multiclone Dust Collector	OPS

Applicable Requirements

Emission Unit vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity
B1	Circulating Fluidized Bed Combustion Boiler #1	Coal	235 MMBtu/hr
B2	Circulating Fluidized Bed Combustion Boiler #2	Coal	235 MMBtu/hr
B3	Spreader Stoker Boiler	Coal Natural Gas	220.4 MMBtu/hr
B4	Spreader Stoker Boiler	Coal Natural Gas	235.1 MMBtu/hr
B5	Chain Grate Stoker Boiler	Coal Natural Gas	223.1 MMBtu/hr
B6	Chain Grate Stoker Boiler	Coal Natural Gas	133.0 MMBtu/hr
B7	Chain Grate Stoker Boiler	Coal	133.0 MMBtu/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Table A

The following BACT emission limits apply to Boilers 1 (EU B1) and 2 (EU B2) when the units are burning Iowa Coal or Equivalent.

Pollutant	Lb/hr	Lb/MMBtu	Other
Sulfur Dioxide (SO_2)	NA	1.0[1]	90% Reduction [1,2]
Nitrogen Oxides (NOx)	NA	0.40[3]	NA
Carbon Monoxide (CO)	34.03[3]	0.145[3]	200 ppm[3]
Lead (Pb)	0.366[4]	0.0015[4]	NA

Pollutant	Lb/hr	Lb/MMBtu	Other
Fluorides (F)	9.124[3]	0.039[3]	NA
Beryllium (Be)	0.148[4]	0.00063[4]	NA

[1] The standard is a 30-day rolling average.
[2] This is a reduction of the potential SO_2 emission rate. The *potential SO_2 emission rate* means the theoretical emissions (lb/MMBtu heat input) that would result from the combustion of coal in the boiler without SO_2 absorption.
[3] Standard is a 3-hour average.
[4] Standard is a 3-hour (minimum) average.

Table B

The following BACT emission limits apply to Boilers 1 (EU B1) and 2 (EU B2) when the units are burning low sulfur western coal or equivalent. For the purposes of this permit, "low-sulfur western coal" means "Rochelle coal" or its equivalent.

Pollutant	Lb/MMBtu	Other
Sulfur Dioxide (SO_2)	0.2[1]	60% reduction [1,2]
Nitrogen Oxides (NOx)	0.40[1]	NA
Carbon Monoxide (CO)	0.145[3]	200 ppm[3]
Lead (Pb)	0.000016[4]	NA
Fluorides (F)	0.007[3]	NA
Beryllium (Be)	0.00000066[4]	NA

[1] The standard is a 30-day rolling average.
[2] This is a reduction of the potential SO_2 emission rate. The *potential SO_2 emission rate* means the theoretical emissions (lb/MMBtu heat input) that would result from the combustion of coal in the boiler without SO_2 absorption.
[3] Standard is a 3-hour average.
[4] Standard is a 3-hour (minimum) average.

Table C

The following NSPS emission limits apply to Boiler 1 (EU B1) and 2 (EU B2)

Pollutant	Additional Limits	Reference
Federal Particulate Matter (PM)	22 ng/J[1]	567 IAC 23.1(2)"ccc"[2]
Opacity	20%[3]	567 IAC 23.1(2)"ccc"[2]
Sulfur Oxides (SO_x)	See Footnote 4	567 IAC 23.1(2)"ccc"[2]
Nitrogen Oxides (NO_x)	260 ng/J[5]	567 IAC 23.1(2)"ccc"[2]

[1] 22 ng/J = 0.051 lb/MMBTU.

[2] IAC reference to NSPS Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units). See also 40 CFR §60.40b – 40 CFR §60.49b.

[3] Opacity shall not exceed 20% (6-minute average), except for one (1) 6-minute period per hour of not more than 27% opacity.

[4] SO_2 emission limit is determined by the following formula:

$$E_s = (K_aH_a + K_bH_b)/(H_a + H_b)$$

where: E_s is the SO_2 emission limit (in either ng/J or lb/MMBTU heat input)
K_a is 520 ng/J or 1.2 lb/MMTU
K_b is 340 ng/J or 0.8 lb/MMBTU
H_a is the heat input from the combustion of coal (in either J or MMBTU)
H_b is the heat input from the combustion of oil (in either J or MMBTU)

Only the heat input supplied from the combustion of coal and oil is counted. No credit is provided for the heat input from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat input from other sources such as gas turbines, internal combustion engines, kilns, etc. This limit is a 30-day rolling average and applies at all times including periods of startup, shutdown, and malfunction.

[5] Per 40 CFR §60.44b(h) and 40 CFR §60.44(i), the limit is a 30-day rolling average that includes periods of startup, shutdown, and malfunction.

Table D
Additional Emission Limits

Pollutant	Lb/hr[1]	Tons/yr[2]	Additional Limits	Reference
State Particulate Matter (PM)	NA	584.1[3]	0.389 lb/MMBtu[4]	567 IAC 23.3(2)"b"
		70[5]	0.034 lb/MMBtu[6]	PSD Synthetic Minor
PM10	NA	NA	NA	NA
Opacity	NA	NA	10%[7]	Previous Permit
			30%[8]	Previous Permit
			40%[9]	567 IAC 23.3(2)"d"
Sulfur Dioxide (SO_2)	NA	NA	1.42 lb/MMBtu[10]	NAAQS
			See Footnote [11]	567 IAC 23.3(3)"a"
Nitrogen Oxides (NO_x)	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA

Pollutant	Lb/hr[1]	Tons/yr[2]	Additional Limits	Reference
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

[1] Standard is expressed as the average of three (3) runs.
[2] Standard is a 12-month rolling total.
[3] Total PM emissions allowed for Boilers 3 – 7 (EU B3, EU B4, EU B5, EU B6, and EU B7). This emission limit is equivalent to the steam production limits set on Boilers 3 – 7 in a previous Department permit. See Permit Condition 15.D. for required recordkeeping for continual compliance demonstration.
[4] Boilers 3 – 7 are each limited to 0.389 lb/MMBTU per a previous Department permit. This limit is based on the multiple stack allowable.
[5] Combined total allowed for Boilers 1 (EU B1) and 2 (EU B2). This limit was established in order for the addition of Boilers 1 (EU B1) and 2 (EU B2) to be a synthetic minor project for particulate matter.
[6] Limit established in the previous permits for Boilers 1 (EU B1) and 2 (EU B2). The previous permits for these units were 86-A-127 (Boiler 1) and 86-A-128 (Boiler 2).
[7] Boilers 1 & 2 are each limited to 10%. This limit was set in a previous permit issued by the Department.
[8] Boilers 3 – 7 are each limited to 30% opacity when Boiler 1 and/or Boiler 2 are operating.
[9] Boilers 3 – 7 are each limited to 40% opacity when Boiler 1 and/or Boiler 2 are not operating.
[10] Limit set on Boilers 1 (EU B1) and 2 (EU B2) by EPA Region VII in its Prevention of Significant Deterioration (PSD) permit issued December 15, 1986. Per the 1986 Fact Sheet, this limit was set in order for the project to demonstrate an insignificant contribution to a predicted violation of the 24-hour PSD increment that existed at the time. This limit is a rolling 3-hour average.
[11] The following SO_2 emission limits apply to Boilers 3 – 7:

- Boiler 3 – Coal: 6 lb/MMBTU
  Natural Gas: 500 ppm
- Boiler 4 – Coal: 6 lb/MMBTU
  Natural Gas: 500 ppm
- Boiler 5 – Coal: 5 lb/MMBTU
  Natural Gas: 500 ppm
- Boiler 6 – Coal: 5 lb/MMBTU
  Natural Gas: 500 ppm
- Boiler 7 – 5 lb/MMBTU

Authority for Requirement: IDNR construction Permit 07-A-923-P

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

NESHAP Applicability

1. Boilers 1 (EU B1) and 2 (EU B2) are subject to 40 CFR 60 Subparts A -Standards of Performance for New Stationary Sources (NSPS) General Provisions.
2. Boiler 1 (EU B1) and 2 (EU B2) are subject to 40 CFR 60 Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units 40 CFR § 60.40b - 40 CFR § 60.49b) of the New Source Performance Standards (NSPS).

These emissions units are of the source type regulated by the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters [567 IAC 23.1(4)"dd"; 40 CFR Part 63, Subpart DDDDD]. On July 30, 2007, the DC Circuit Court vacated this entire standard. Since the standard has been vacated, the units may be subject to the requirements of section 112(j) of the Clean Air Act. Section 112(j) requires the facility to submit an application addressing the control of HAP emissions from these units and the required MACT (Maximum Achievable Control Technology) shall be incorporated into the facility's Title V operating permit. The Iowa DNR - Air Quality Bureau is currently developing a procedure regarding how to implement Section 112(j) requirements for units that were subject to the vacated rule. If the facility is required to modify the units or control equipment to comply with section 112(j), then the facility shall submit an application to modify this construction permit.

Authority for Requirement: 567 IAC 23.1(2)"ccc"
IDNR construction Permit 07-A-923-P

Process Throughput

1. Boilers 1 (EU B1) & 2 (EU B2) are restricted to coal, with gas and/or oil start-up. As used in this permit, “coal” means the coal supply (or similar, Midwestern, coal supplies) which was used by EPA Region VII in setting the SO_2 BACT emission limitations of Permit Condition 10a.
2. Only Iowa coal (or its equivalent) or the Rochelle coal supply (or its equivalent), as reviewed and approved by EPA Region VII may be burned in Boilers 1 (EU B1) & 2 (EU B2). Combinations of said fuels are not allowed without the prior approval of the Department and without the prior modification of this permit.
3. The owner or operator must receive the Department’s approval if the owner or operator wants to burn a fuel other than the coal listed in Condition 14.A. on a continuous or trial basis. At that time, agency may impose BACT emission standards (including a SO_2 percent reduction requirement) for the other fuel type(s) in question even if an emissions reduction will occur. Other PSD related provisions (e.g., ambient air quality analyses) may also be imposed.
4. The owner or operator shall notify the Department whenever the owner or operator changes from one approved fuel supply to another approved fuel supply on Boilers 1 (EU

B1) & 2 (EU B2). Said notification shall be by letter, postmarked no later than two weeks (14 calendar days) after the date of the switch.

5. The owner or operator shall record on a daily basis the type(s) of fuel combusted in Boilers 1 (EU B1) & 2 (EU B2) on that day.
6. After the initial compliance test on Boilers 1 (EU B1) & 2 (EU B2), the owner or operator shall collect a 24-hour representative coal sample. The coal sample shall meet the following conditions
   i. The frequency shall be at least once every two (2) weeks and whenever the owner or operator changes the coal supply fired in the either boiler.
   ii. Coal sampling and analyses (CSA) of the individual boilers is not required under this condition if the subject boiler is not operated during the two-week period of if the boiler is operated on a fuel other than coal.
   iii. Each composite sample shall meet the sampling requirements for special purpose sampling of ASTM D2234-76.
   iv. The composite sample collection classification shall meet Type 1, Condition A, B, or C, with systematic spacing, as defined by ASTM D2234-76.
   v. The composite sample shall be collected as close to an "as-fired" condition as practicable.
   vi. The proposed location, sampling, and analytical collection methodology shall be submitted to and approved by the EPA regional office prior to operation of the herein-approved boilers.
   vii. For each low sulfur western coal sample (or equivalent) collected by the owner or operator as required above, the owner or operator shall obtain analyses of the Be, Pb, and F content within two (2) weeks of sample collection.
   viii. After a year of operation of the PSD-approved boiler on the herein-approved low sulfur western coal, the owner or operator may request a revision of the elimination of the sampling frequency if a lesser frequency appears appropriate.
   ix. Of its own accord, the PSD permit reviewing authority may also revise the frequency and/or the CSA procedures of this condition if it determines that a revision is needed for purposes of verification of compliance with the Be, Pb, and/or F emission limit(s) of Condition 10a.
   x. The Be, Pb, and F concentrations that are determined through the above sampling and analyses procedures shall serve as an indicator of probably compliance (or noncompliance) with the applicable BACT emission limit.
   xi. When requested to do so by the EPA regional office, the owner or operator shall at its own expense formally verify compliance through stack testing of boiler emissions with subsequent submittal of a report of the test.
7. The owner or operator shall notify both the EPA Region VII and the Department whenever the owner or operator changes from one approved fuel supply to another approved fuel supply. The notification shall be by letter, postmarked no later than two weeks (14 calendar days) after the date of the switch.
8. Boilers 1 (EU B1) & 2 (EU B2) are subject to all applicable operating limits set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and Db (40 CFR §60.40b – 40 CFR §60.49b).
9. Boilers 3 (EU B3), 4 (EU B4), 5 (EU B5), and 6 (EU B7) are limited to firing on natural gas and coal.

10. Boiler 7 (EU B7) is limited to firing on coal.

Authority for Requirement: IDNR construction Permit 07-A-923-P

Reporting & Recordkeeping
The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The owner or operator shall maintain records, on a daily basis, of the type(s) of fuel combusted in each of the boilers on that day.
2. All applicable recordkeeping set forth in NSPS Subparts A (40 CFR §60.1 – 40 CFR §60.19) and Db (40 CFR §60.40b – 40 CFR §60.49b) for Boilers 1 (EU B1) & 2 (EU B2).
3. The following records shall be kept in order to demonstrate continual compliance with the State PM standard of 584.1 tons/yr for Boilers 3 – 7 (EUs B3 – B7):
   - A copy of the summary of the last two (2) PM stack tests for each boiler (EUs B3 – B7).
   - The average tested emission rate for each boiler (EUs B3 – B7) from the two (2) previous stack tests.
   - The date and hours of operation for each boiler (EUs B3 – B7).
   - Calculate the total State PM emission rate [(hours of operation) x (average tested emission rate)] for each boiler (EUs B3 – B7) for each day of operation.
   - Calculate the combined total State PM emissions from Boilers 3 – 7 (EU B3 – B7) on a monthly basis. Records for total State PM emissions shall be kept on a monthly basis until the total State PM emissions exceed 438.1 tons/yr. At this point the owner or operator shall immediately begin keeping a 365-day rolling total amount of total State PM emitted at the facility (Plant Number 85-01-007). Calculation requirements will revert back to a monthly basis if the 365-day rolling total is returned to below 438.1 tons/yr for total State PM.

Authority for Requirement: IDNR Construction Permit 07-A-923-P

Continuous Emissions Monitoring

In accordance with 40 CFR §60.48b(a), the owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) on Boilers 1 (EU B1) & 2 (EU B2), and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the administrator). The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 1 (PS1).

The owner or operator shall install, calibrate, maintain, and operate continuous emission monitoring (CEM) systems, and record the output of the systems, for measurement of the SO2, NOx and oxygen (or carbon dioxide) emissions from Boilers 1 (EU B1) & 2 (EU B2). The oxygen (or carbon dioxide) content of the combustion gases shall be measured at each location where SO2 and NOx emissions are monitored. Each CEM shall be installed at a location acceptable to the PSD implementing agency.

Compliance with the SO2 and NOx emission standards of this permit for Boilers 1 (EU B1) & 2 (EU B2) shall be continuously demonstrated by the owner or operator through the use of the CEM system. All emission averages shall be the arithmetic average emission rate. The procedures under 40 CFR §60.13 shall be followed by the owner or operator with regard to installation, evaluation, and operation of the CEMS, and as required in this permit.

At all times while Boilers 1 (EU B1) & 2 (EU B2) are being operated, the CEMS installed pursuant to this permit shall be designed, installed, calibrated, maintained, operated, and qualified in accordance with 40 CFR Part 60, Appendix A and B, and as required by this permit.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation. Each SO2 and NOx CEM shall complete a minimum of one cycle of sampling, analyzing, and recording for each successive 15-minute period and one cycle of data reporting for each successive one-hour period. Each CEM shall continuously meet all the data recovery and performance requirements of this permit. Should the SO2 or NOx CEM fail to meet the applicable rolling 30-day data recovery requirements that are specified below (as calculated each day) for five consecutive days, the owner or operator shall within thirty (30) days of the end of the fifth period demonstrate that the CEM has complied with all the applicable provisions of this permit.

In order to ensure validation of all CEM compliance data, the owner or operator shall check the systems periodically to determine if the CEM readings are both accurate and precise. Quality assurance (QA) checks shall be done in accordance with a written quality control procedure, once daily, for each parameter monitored by assessing the precision and accuracy of the CEM data using at a minimum the manufacturer's recommended quality assurance procedures.

The daily checks shall involve those critical components of the instrument used in measuring the gas concentration of the effluent. All cleaning and adjustments shall be made in accordance with 40 CFR Part 60, Appendix B, and as recommended by the quality control plan.

Unless otherwise approved by the permit issuing agency, the selection of the SO2 CEM span value (maximum data display output) shall be 200 percent of the nominal emission limit specified in this permit for that parameter. The span value for the NOx CEM shall be 500 ppm.

In addition to the provisions of 40 CFR Part 60, Appendix B, the performance specifications applicable to the CEMS required by this permit shall include a data recovery requirement of 75 percent, and shall meet precision and accuracy requirements of 10 percent, and 10 percent of the applicable standard, respectively, unless otherwise specified in this permit. When the minimum

SO2 data requirements of this permit cannot be attained, the methods and procedures of 40 CFR §60.47a(h) shall be employed by the owner or operator to obtain the required data.

For the CEMS which continually monitor and record gaseous emissions of SO2 or NOx, the output (in units of the standard) of the specific CEMS will be continual evidence of compliance with the applicable permit emission limitations. Where data produced by the CEM and concurrent data produced pursuant to other methodologies differ for the same period of time, and both the CEMS and the conflicting data are collected in accordance with all applicable provisions and requirements of federal law, regulation, and this permit, the CEM data shall be the best and most probative evidence of compliance with applicable performance or emission standards of this permit. Each CEM required under this permit shall meet all applicable provisions (as amended, as of the date of commencement of construction of the permitted boilers) of 40 CFR Part 60, Appendix B, Specifications No. 2 and 3, and related provisions of this permit.

> NOTE: A "*boiler operating day*" means each 24-hour period between midnight and the following midnight during which any fuel is combusted in the boiler. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

The PSD-implementing agency will consider revision, relaxation, or elimination of any requirement of Condition 16 if the owner or operator demonstrates to said agency's satisfaction that the change is justified.

Authority for Requirement: IDNR Construction Permit 07-A-923-P

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 240
Stack Opening, (inches, dia.): 144
Exhaust Flow Rate (scfm): 434,300
Exhaust Temperature (°F): 300
Discharge Style: Unobstructed Vertical
Authority for Requirement: IDNR construction Permit 07-A-923-P

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

> NOTE: there is also a short stack (EP ss) that all of the emission units and control equipment are connected to. The only difference between EP S and EP ss is the stack height. EP ss has a stack height of 199 ft. This stack shall only be used during inspection and/or maintenance of the tall stack (EP s). Prior to these activities, ISU shall notify the DNR field office and also visually monitor opacity levels during daytime hours using

plant staff certified to Method 9. All of the applicable requirements for the boilers (i.e. emission limits, operating limits, recordkeeping, operating condition monitoring, etc.) apply when EP ss is used, with the exception of those requirements relating to the common stack (EP S) opacity monitor which was installed on EP S pursuant to Condition IV (D) of the EPA Region VII Order of August 24, 1976.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing: a particulate matter stack test using Method 5 of the Iowa Compliance Sampling Manual is required to be conducted during the first two years of this permit. (Note: A deadline date will be provided when the final permit date is established.)

Pollutant - Particulate Matter (PM) (Boilers 1 - 7)
1st Stack Test to be Completed by (date) - within first two years of permit term
Test Method - Iowa Compliance Sampling Manual Method 5
Authority for Requirement 567 IAC 22.108(3)

Continuous Emissions Monitoring: Boiler 1 (EU B1) & Boiler 2 (EU B2)

Pollutant - Opacity, Oxygen(O_2) or Carbon Dioxide (CO_2), Nitrogen Oxide (NO_x), and Sulfur Oxide (SO_x)
Operational Specifications - Iowa PSD Permit 07-A-923-P
Date of Initial System Calibration and Quality Assurance - February 9, 1989
Ongoing System Calibration/Quality Assurance - Section 16 of IDNR PSD permit 07-A-923-P, dated 11/2/07.
Reporting & Record keeping - Submit all reports ad petitions as required by Section 16, IDNR PSD Permit 07-A-923-P, dated 11/2/07.
Authority for Requirement IDNR PSD Permit 07-A-923-P, dated 11/2/07.

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring Plan
Fluidized Bed (Pulverized Limestone) for SOx Control

Emission Point ID Number: EPS or EPss

Emission Unit Description: Circulating Fluidized Bed Combustion Boilers # 1 and # 2

Associated Emission Unit ID Numbers: B1 and B2

Emissions Control Equipment ID Number: B1 and B2

Emissions Control Equipment Description: Fluidized Bed (Pulverized Limestone)

Continuous Emissions Monitors ID Numbers: CEM Units S1 and S2

Emission Limits

Pollutant: Sulfur Dioxide (SO_2)

Emission Limits: 1.42 lb/MMBtu, rolling 3 hr average
1.0 Lb/MMBtu, 30 day rolling average (90% Reduction when the units are burning
Iowa Coal or equivalent)
0.2 lb/MMBtu, 30 day rolling average (60% Reduction when the units are burning low sulfur western coal or its equivalent).

Authority for Requirement: IDNR PSD Permit 07-A-923-P

Fluidized Bed Monitoring Guidelines:

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Continuous Emissions Monitoring:

Pollutant - Sulfur Dioxide (SO_2)
Operational Specifications - 40 CFR Part 60, Appendix B

Initial System Calibration/Quality Assurance -February 9, 1989
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60, Appendix B
Reporting & Record keeping - IDNR PSD Permit 07-A-923-P
Authority for Requirement - IDNR PSD Permit 07-A-923-P

Monitoring Methods & Corrective Actions

General
• Monitoring will be completed during unit operation.

Indicator
• SO_2 emission levels
• limestone feed rates

Continuous SO2 emissions levels and continuous limestone feed rates will be used as an indicator.

Measurement Approach
• Performance of the SO_2 emission control system may be monitored by observing SO_2 emissions rate on operator interface screens for Boilers No. 1 & No. 2. In addition, the SO_2 emissions rates can be monitored using the continuous emission monitoring system data acquisition system (CEMDAS). High emission rate alarms are provided on the CEMDAS operator interface. Additionally, the status of the SO2 emission rate is recorded in the CEM. SO2 emission levels and limestone feed rates are also trended on the control system operator interface screens and control panel.

Indicator Range
• SO_2 emission rate greater than 0.8 lb/MMBtu when Boiler Nos. 1 & 2 are burning Iowa Coal.
• SO2 emission rate greater than 0.1 lb/MMBtu when Boiler Nos. 1 & 2 are burning low sulfur coal.

QIP (Quality Improvement Plan) Threshold
• The QIP threshold is six excursions in a six month reporting period.

Performance Criteria

Data Representativeness:	SO2 emission control system performance assessments may be accomplished by reviewing the CEMDAS information and Boiler. Daily SO2 emission and percent reduction reports and monitoring boiler operator interfaces. Certain boiler transients temporarily produce large variation in SO2 emission rates. Examples include soot blowing operations and rapid changes in boiler load. However, these transients should not produce a prolonged change in the SO2 emission rate:
Verification of operational status:	Records of SO2 emission rates will be

maintained for five years.

QA/QC practices and criteria: At all times while Boilers 1 (EU B1) & 2 (EU B2) are being operated, the CEMS installed pursuant to this permit shall be designed, installed, calibrated, maintained, operated, and qualified in accordance with 40 CFR Part 60, Appendix A and B, and as required by this permit.

Monitoring frequency and data Collection procedure: SO2 emission rates shall be continuously recorded whenever the emission units are operational. Records of the SO2 emission rates shall be maintained for five years.

Justification

A. Background
This facility provides power and steam to Iowa State University. The pollutant specific emission units are circulating fluidized bed boiler 1 (B1) and circulating fluidized boiler 2 (B2).

B. Rationale for Selection of Performance Indicator
The continuous SO2 emission rates provided by the CEMDAS were selected as the performance indicator because it is indicative of operation of each boiler in a manner necessary to comply with the sulfur dioxide emission standard. A monitored SO2 emission rate equal to or greater than the indicator ranges would indicate a reduced performance of sulfur reduction capability of these boilers. Therefore, the monitoring of the sulfur dioxide emission rate is used as a performance indicator.

C. Rationale for Selection of Indicator Level
The selected indicator range is an SO2 emission rate greater than 0.8 lb/MMBtu when Boiler Nos. 1 & 2 are burning Iowa Coal and a SO2 emission rate greater than 0.1 lb/MMBtu when Boiler Nos. 1 & 2 are burning low sulfur coal. If a SO2 emission rate is monitored that is greater than the values noted, corrective action will be taken within 8 hours.

The CEMDAS monitored sulfur dioxide emission rates noted above were selected as indicator ranges because a SO2 emission rate greater than these values are indicative of a potential increase in sulfur dioxide emissions due to a decrease in the performance of the fluidized bed. If the fluidized bed is operating properly, SO2 emission rates greater than the indicator ranges will not be seen, except during start up, shut down, and upset conditions.

The selected QIP threshold for each fluidized bed boiler is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan
Pulse Jet Baghouse for PM Control

Emission Point ID Number: EPS or EPss

Emission Unit Description: Circulating Fluidized Bed Combustion Boilers # 1 and # 2

Associated Emission Unit ID Numbers: B1 and B2

Emissions Control Equipment ID Number: BGH1 and BGH2

Emissions Control Equipment Description: Pulse Jet Baghouse

Baghouse Monitoring Guidelines:
The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Continuous Emissions Monitors ID Numbers: OPS

Emission Limits
Pollutant: Opacity
Emission Limits: 10%
Authority for Requirement: Previous Permit

Pollutant: Federal Particulate Matter
Emission Limits: 0.051 lb/MMBtu

Authority for Requirement: 567 IAC 23.1(2)"ccc"
40 CFR §60.40b - 40 CFR §60.49b
IDNR PSD Permit 07-A-923-P

Pollutant: State Particulate Matter
Emission Limits: 0.389 lb/MMBtu
0.034 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
PSD Synthetic Minor

Continuous Emissions Monitoring:

Pollutant - Opacity
Operational Specifications - 40 CFR Part 60, Appendix B
Initial System Calibration/Quality Assurance -February 9, 1989
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60, Appendix B
Reporting & Record keeping - IDNR PSD Permit 07-A-923-P
Authority for Requirement - IDNR PSD Permit 07-A-923-P

Monitoring Methods & Corrective Actions

General
• Monitoring will be completed during unit operation.

Indicator
• Pressure Drop
Daily pressure drop checks will be used as an indicator.

Measurement Approach
• Pressure drop will be checked daily to ensure that no pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range or a pressure drop greater than 9 inches of water occurs during the material handling operation of the unit.

Indicator Range
• Pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range.
• Pressure drop should not exceed 9 inches of H_2O

QIP (Quality Improvement Plan) Threshold
• The QIP threshold is six excursions in a six month reporting period.

Performance Criteria

Data Representativeness:	Pressure drop of greater than 1.5 inches of H_20 below the recent normal operating range or an increase in pressure drop above 9 inches of water would indicate a decrease in the performance of the baghouse and potentially indicate an increase of particulate emissions.
Verification of operational status:	Records of pressure drop readings will be maintained for five years.

QA/QC practices and criteria:	The facility shall check the pressure drop daily when the emission unit on this emission point is in operation. If a pressure drop of greater than 1.5 inches of H_2O below the recent normal operating range or a pressure drop greater than four inches of water is observed, corrective action will be taken within 8 hours.
Monitoring frequency and data Collection procedure:	Pressure drop readings shall be conducted daily during a period when the emission unit on this emission point is in operation. Records of the readings shall be maintained for five years.

Justification

A. Background
The pollutant specific emission unit is baghouse (BGH1) and baghouse (BGH2) that control emissions from Boilers 1 and 2 respectively at the facility. The controlled exhaust flow rate is approximately 97,764 standard cubic feet per minute.

B. Rationale for Selection of Performance Indicator
The daily pressure drop readings were selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. A pressure drop of greater than 1.5 inches of water below the recent normal operating range or an increase in pressure drop beyond 8.5 inches of water would indicate a reduced performance of this baghouse. Therefore, the detection of excessive pressure drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level
The selected indicator range is a pressure drop of greater than 1.5 inches of water below the recent normal operating range or an increase in pressure drop beyond 9 inches of water. If a pressure drop greater than the values noted is observed, corrective action will be taken within 8 hours.

The changes in pressure drop noted above were selected as indicator ranges because a pressure drop greater than these values are indicative of a potential increase in particulate emissions due to a decrease in the performance of this baghouse. If the baghouse is operating properly, there will not be a pressure drop greater than 9 inches of water except during start up, shut down, and upset conditions.

The selected QIP threshold for the baghouse is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan
Electrostatic Precipitator for PM Control

Emission Point ID Number: EPS or EPss

Emission Unit Description: Spreader Stoker Boilers

Associated Emission Unit ID Numbers: B3 and B4

Emissions Control Equipment ID Number: P3 and P4

Emissions Control Equipment Description: Electrostatic Precipitator

Electrostatic Precipitator Monitoring Guidelines:
The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Continuous Emissions Monitors ID Numbers: OPS

Emission Limits
Pollutant: Opacity
Emission Limits: 30 % when Boiler 1 and/or Boiler 2 are operating
40% when Boiler 1 and/or Boiler 2 are not operating
Authority for Requirement: 567 IAC 23.3(2)"d",
IDNR PSD Permit 07-A-923-P

Pollutant: Federal Particulate Matter
Emission Limits: 0.389 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
IDNR PSD Permit 07-A-923-P

Continuous Emissions Monitoring:
Pollutant - Opacity
Operational Specifications - 40 CFR Part 60, Appendix B
Initial System Calibration/Quality Assurance -February 9, 1989
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60, Appendix B
Reporting & Record keeping - IDNR PSD Permit 07-A-923-P
Authority for Requirement - IDNR PSD Permit 07-A-923-P

Monitoring Methods & Corrective Actions
General
• Monitoring will be completed during unit operation.

Continuously
• Opacity Monitoring
Corrective action measures will be implemented when the opacity exceeds 30 % when Boiler 1 and/or Boiler 2 are operating and 40% when Boiler 1 and/or Boiler 2 are not operating, for more than one non-exempted six (6) minute average. If exceeded this would be a permit violation. The appropriate measures for remediation will be implemented within eight (8) hours plus the period of time until generating capacity is available to meet consumer demand.
• Audible Precipitator Malfunction Alarm
The precipitator malfunction alarm will continuously monitor T-R set failure. Corrective action measures will be implemented on the occurrence of a precipitator malfunction alarm. The appropriate measures for remediation will be implemented within eight (8) hours plus the period of time until generating capacity is available to meet consumer demand.

Daily
• Inspection of rapper operation
• Inspection of T-R set operation
• Inspection of ash removal system operation
Corrective action measures will be implemented on the occurrence of an abnormal condition. Abnormal conditions will include the following: T-R set failure, rapper system failure, ash transport system failure, high ash hopper level. The appropriate measures for remediation will be implemented within eight (8) hours plus the period of time until generating capacity is available to meet consumer demand.

Each Major Unit Overhaul
• Check and correct plate electrode alignment
• Inspect for collection surface fouling
• Inspect T-R set mechanical condition
• Inspect internal structural components
Corrective action measures will be devised and implemented on the occurrence of an abnormal condition. The appropriate measures for remediation will be implemented in a timely manner.

Record Keeping and Reporting
• Opacity reports and supporting data

• Maintain a written or electronic record of all inspections and any action resulting from the inspection.
• Maintenance and inspection records will be kept for five (5) years and available upon request.

Quality Control
• The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.
• All instruments and control equipment will be calibrated, maintained, and operated according to the manufactures specifications.
• A spare parts inventory is maintained by a computerized inventory management system. Parts are automatically queued for re-order when the inventory level falls below a minimum re-order point.

Rationale for the Proposed Elements of the Monitoring

The Iowa State University Power Plant personnel have proposed to use the continuous opacity monitor and an audible alarm to continuously monitor critical electrostatic precipitator equipment, combined with daily inspections of the electrostatic precipitator electro-mechanical operation as the monitoring method for particulate matter. A major inspection of the electrostatic precipitator will be completed during the unit's scheduled maintenance outage.

Proper operation of the electrostatic precipitator is essential to maintaining effective particulate collection. A range of 30% to 40% opacity has been selected as the indicator ranges based on the unit's opacity limit and operational restrictions. 30% opacity is the limit if Boiler 1 or Boiler 2 are operating. 40% opacity is the indicator if only the stoker boilers are running. Although all boiler units and control equipment at this facility vent through a common stack, until the cause for an excursion has been identified, an opacity excursion lasting longer than one non-exempted six (6) minute average could indicate improper operation of the electrostatic precipitator.

Rapper system operation, T-R set operation and ash removal system operation are indicators of the proper electro-mechanical operation of the electrostatic precipitator. An audible alarm will continuously monitor T-R set failure and rapper control health. Daily inspection of the rapper system operation, T-R set operation and ash removal system provides additional assurance of proper electro-mechanical operation of the electrostatic precipitator.

Proper operation of the electrostatic precipitator is also affected by the condition of internal components such as the collection surfaces, wires and insulators. A major inspection that includes internal components will provide assurance that the electrostatic precipitator is in good repair.

Compliance Assurance Monitoring Plan
Multiclone for PM Control

Emission Point ID Number: EPS or EPss

Emission Unit Description: Chain Grate Stoker Boilers

Associated Emission Unit ID Numbers: B5, B6, and B7

Emissions Control Equipment ID Number: DC5, DC6, and DC7

Emissions Control Equipment Description: Multiclone Dust Collector

Continuous Emissions Monitors ID Numbers: OPS

Emission Limits

Pollutant: Opacity
Emission Limits: 30 % when Boiler 1 and/or Boiler 2 are operating
40% when Boiler 1 and/or Boiler 2 are not operating
Authority for Requirement: 567 IAC 23.3(2)"d",
IDNR PSD Permit 07-A-923-P

Pollutant: Federal Particulate Matter
Emission Limits: 0.389 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
IDNR PSD Permit 07-A-923-P

Continuous Emissions Monitoring:

Pollutant - Opacity
Operational Specifications - 40 CFR Part 60, Appendix B
Initial System Calibration/Quality Assurance -February 9, 1989
Ongoing System Calibration/Quality Assurance - 40 CFR Part 60, Appendix B
Reporting & Record keeping - IDNR PSD Permit 07-A-923-P
Authority for Requirement - IDNR PSD Permit 07-A-923-P

Multiclone Monitoring Guidelines:

The facility makes a commitment to take timely corrective action during periods of excursion where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time, or the presence of a monitored abnormal condition. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the excursion to the department and conduct source testing within 90 days of the excursion to

demonstrate compliance with applicable requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Monitoring Methods & Corrective Actions

General

• Monitoring will be completed during unit operation.

Continuously

• Opacity Monitoring

Corrective action measures will be implemented when the opacity exceeds 30 % when Boiler 1 and/or Boiler 2 are operating and 40% when Boiler 1 and/or Boiler 2 are not operating, for more than one non-exempted six (6) minute average. If exceeded, this would be a permit violation. The appropriate measures for remediation will be implemented within eight (8) hours plus the period of time until generating capacity is available to meet consumer demand.

Daily

• Plant staff will visually check multiclone hopper outlets to ensure the discharge pipes are hot to the touch, thus indication a flow of ash from the hoppers.
• Inspect the solids discharge valve for proper operation.

Corrective action measures will be implemented on the occurrence of an abnormal condition. Abnormal conditions will include the following: Erosion of the outlet tubes, failure of one or more of the gaskets on the clean side tube sheet, and erosion of the axial inlet spinner vanes. The appropriate measures for remediation will be implemented within eight (8) hours plus the period of time until generating capacity is available to meet consumer demand.

Each Major Unit Overhaul

• Inspect the hopper unloading components.
• Check for leaks in the system to ensure the airflow from the dirty side doesn't infiltrate the clean side. Verify that the inlet and outlet ductwork is in good operating condition.
• Check the barrel and collecting tube for deposits and/or excess wear and clean/repair as needed. Dents in the barrel or collecting tube must be removed to ensure proper operation.
• Clean cyclone inlet vanes (ramps or spinners) and ensure they operate according to manufacture specifications.

Corrective action measures will be devised and implemented on the occurrence of an abnormal condition. The appropriate measures for remediation will be implemented in a timely manner.

Record Keeping and Reporting

• Boiler operator logs
• CEMDAS common stack daily opacity summary reports.
• A written or electronic record of all maintenance and inspections and any action resulting from the inspections..

Quality Control
• The continuous opacity monitor will be automatically calibrated for zero and span adjustments daily.
• Any non-exempt visible emissions in excess of permitted limits, for one six-minute period in one hour, will be reported and corrective action will be taken to correct the problem.
• A spare parts inventory is maintained by a computerized inventory management system. Parts are automatically queued for re-order when the inventory level falls below a minimum re-order point.

Rationale for the Proposed Elements of the Monitoring

The Iowa State University Power Plant personnel have proposed to use the continuous opacity monitor combined with daily inspections of each multiclone as the monitoring method for particulate matter. A major inspection of each multiclone will be completed during the unit's scheduled maintenance outage.

Proper operation of the multiclone is essential to maintaining effective particulate collection. A range of 30% to 40% opacity has been selected as the indicator ranges based on the unit's opacity limit and operational restrictions. 30% opacity is the limit if Boiler 1 or Boiler 2 are operating. 40% opacity is the indicator if only the stoker boilers are running.. Although all boiler units and control equipment at this facility vent through a common stack, until the cause for an excursion has been identified, an opacity excursion lasting longer than one non-exempted six (6) minute average could indicate improper operation of each multiclone.

Emission Point ID Number: EP1

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU1
Emissions Control Equipment ID Number: CE1A and CE1B
Emissions Control Equipment Description: Centrifugal Separator and Pulse Jet Baghouse

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Emission Unit vented through this Emission Point: EU1
Emission Unit Description: CFB Ash Transport ~~(Ash Conveying System)~~
Raw Material/Fuel: Fly Ash
Rated Capacity: 20 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0%

Authority for Requirement: IDNR Construction Permit 86-A-139

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf and 9.37 TPY
Authority for Requirement: IDNR Construction Permit 86-A-139

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping
The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

Excess opacity must be reported to the Iowa DNR orally and in writing per 567 IAC 24.1(455B).

Authority for Requirement: IDNR construction Permit 86-A-139

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP2

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU2
Emissions Control Equipment ID Number: CE2
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU2
Emission Unit Description: CFB Ash Storage Silo Vent ~~(Ash bin Vent)~~
Raw Material/Fuel: Fly Ash
Rated Capacity: 20 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0% at the exhaust

Authority for Requirement: IDNR Construction Permit 86-A-140

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 gr./dscf and 0.15 Tons/yr
Authority for Requirement: IDNR Construction Permit 86-A-140

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping
The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

> Excess opacity must be reported to the Iowa DNR orally and in writing per 567 IAC 24.1 (455B0.

Authority for Requirement: IDNR Construction Permit 86-A-140

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP3

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU3
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU3
Emission Unit Description: Truck Loading-Dry CFB Ash (Fugitive)
Raw Material/Fuel: Fly Ash
Rated Capacity: 20 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide
Authority for Requirement: 567 IAC 23.3(2)"c"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP4

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU4
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU4
Emission Unit Description: CFB Wet Ash Mixer Vent (fugitive)
Raw Material/Fuel: Fly Ash
Rated Capacity: 20 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide
Authority for Requirement: 567 IAC 23.3(2)"c"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP5

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU5
Emissions Control Equipment ID Number: CE5
Emissions Control Equipment Description: Wet Ash Mixer

Emission Unit vented through this Emission Point: EU5
Emission Unit Description: Truck Loading - Wet CFB Ash (Fugitive) ~~(Ash Rotary Unloader)~~
Raw Material/Fuel: Fly Ash
Rated Capacity: 20 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 20%[1]

[1] No visible emissions at the property line.

Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 86-A-141

Pollutant: Particulate Matter (PM)
Emission Limit(s): 4.51 Tons/yr
Authority for Requirement: IDNR Construction Permit 86-A-141

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide
Authority for Requirement: 567 IAC 23.3(2)"c"

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At

least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP20

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU20
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU20
Emission Unit Description: Front End Loader – CFB Coal Hopper (fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 150 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 20%[1]

[1] No visible emission at the property line.

Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 86-A-129

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.776 Tons/yr
Authority for Requirement: IDNR Construction Permit 86-A-129

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP21

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU21
Emissions Control Equipment ID Number: CE21
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU21
Emission Unit Description: CFB Coal Conveyor 01
Raw Material/Fuel: Coal
Rated Capacity: 150 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 0% at the exhaust; less than 5% opacity from the pick up points.

Authority for Requirement: IDNR Construction Permit 86-A-132

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 gr./dscf
0.206 Tons/yr
Authority for Requirement: IDNR Construction Permit 86-A-132

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP22

Associated Equipment

Emission Unit	Emissions Control ID Number	Emissions Control Equipment Description	Emissions Unit Description	Raw Material/Fuel	Rated Capacity
EU-22A	CE22A	Pulse Jet Baghouse	CFB Drag Chain 2A (North)	Coal (Conveyor 2A and Transfer Points)	150 Tons/hr
EU-22B	CE22B	Pulse Jet Bag Filter	CFB Drag Chain 2B (south)	Coal (Conveyor 2B and Transfers Points)	150 Tons/hr
EU-22C	CE22C	Pulse Jet Baghouse	Coal Silo 1 Loading	Coal	150 Tons/hr
EU-22D	CE22D	Pulse Jet Baghouse	Limestone Silo 2 Loading	Limestone	200 Tons/hr
EU-22E	CE22E	Pulse Jet Baghouse	Coal Silo 3 Loading	Coal	150 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Emission Unit	Pollutant	Emission Limit	Authority
EU-22A	Opacity	0% at exhaust	IDNR Construction Permit 86-A-133
		5% opacity from the pick up points	
	Particulate Matter	0.01 gr/dscf	
		0.377 Tons/yr	
EU-22B	Opacity	0% at exhaust	IDNR Construction Permit 86-A-134
		5% opacity from the pick up points	
	Particulate Matter	0.01 gr/dscf	
		0.377 ton/year	
EU-22C	Opacity	0% at exhaust	IDNR Construction
		5% opacity from the	

Emission Unit	Pollutant	Emission Limit	Authority
		pick up points	IDNR Construction Permit 86-A-135
	Particulate Matter	0.01 gr/dscf	
		0.131 Tons/yr	
EU-22D	Opacity	0%	IDNR Construction Permit 86-A-138-S1 567 IAC 23.3(2)"A"
	Particulate Matter	0.1 gr/dscf	
		0.171 lb/hr[1]	
EU-22E	Opacity	0% at exhaust	IDNR Construction Permit 86-A-136
		5% opacity from the pick up points	
	Particulate Matter	0.01 gr/dscf	
		0.131 tons/yr	

[1]This source was part of a project that originally netted out of PSD PM review in 1986. This revised limit, in conjunction with the removal of the source permitted as 86-A-137 and the ability to run only one of the two sources (86-A-133 and 86-A-134) at a time, remains insignificant for PSD.

Operational Limits & Requirements (EU-22D)

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput

The operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

The operator shall keep records of baghouse inspections and maintenance.

Authority for Requirement: IDNR construction Permit 86-A-138-S1

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below:

Opacity shall be observed on a weekly basis to ensure no visible emission during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later that eight hours form the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirements 567 IAC 22.108 (14)

Emission Point Characteristics (EU-22D)
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): NA (vents inside)
Stack Opening, (inches, dia.): 17 inches x 8 inches
Exhaust Flow Rate (scfm): 2,000
Exhaust Temperature (°F): Ambient
Discharge Style: NA (vents inside)
Authority for Requirement: IDNR Construction permit 86-A-138-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP30

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU30
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU30
Emission Unit Description: Front End Loader Stoker Coal Hopper (fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 100 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide Conditions

Authority for Requirement: 567 IAC 23.3(2)"c"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP30A

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU30A
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU30A
Emission Unit Description: Stoker Transfer House (Fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 100 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide Conditions

Authority for Requirement: 567 IAC 23.3(2)"c"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP31

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU31
Emissions Control Equipment ID Number: CE31
Emissions Control Equipment Description: Pulse Jet Cartridge Filter

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Emission Unit vented through this Emission Point: EU31
Emission Unit Description: Stoker Coal Bunker Loading
Raw Material/Fuel: Coal
Rated Capacity: 100 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 0.02 gr./scf
lb/hr
4.38 Tons/yr
Authority for Requirement: IDNR Construction Permit 81-A-126-S1

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 77
Stack Opening, (inches, dia.): 2.6 inches x 3.0 inches
Exhaust Flow Rate (scfm): 5,500
Exhaust Temperature (°F): Ambient
Authority for Requirement: 81-A-126-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP40

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU40A, EU40B, EU40C
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU40A
Emission Unit Description: Coal Storage Pile - Truck Unloading (Fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 100 Tons/hr

Emission Unit vented through this Emission Point: EU40B
Emission Unit Description: Coal Storage Pile - Front End Loader Reclaimer (Fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 100 Ton/hr

Emission Unit vented through this Emission Point: EU40C
Emission Unit Description: Coal Storage Pile - Wind Erosion (Fugitive)
Raw Material/Fuel: Coal
Rated Capacity: 1.194 Acres

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 20%[1]

[1] No visible emissions at the property line.

Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 86-A-130
IDNR Construction Permit 86-A-131

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.245 tons/yr[2] and 0.140 Tons/yr[3]

[2] Emissions from the unloading of coal from trucks.

[3] Emissions from reclaiming coal with a front-end loader.

Authority for Requirement: IDNR Construction Permit 86-A-130
IDNR Construction Permit 86-A-131

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The facility shall check the opacity weekly during a period when coal is being unloaded form a truck and when coal is being loaded by the front-end-loader and record the readings. Maintain a written record of the observations and any action resulting from the observations for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

2. If an opacity > (20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours form the observation of visible emissions. If weather conditions prevent the observer form conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals through out the day. If all observation attempts for a week have been unsuccessful doe to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP50

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU50
Emissions Control Equipment ID Number: CE50A, CE50B, and CE50C
Emissions Control Equipment Description: Centrifugal Separator, Centrifugal Separator, Pulse Jet Baghouse

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Emission Unit vented through this Emission Point: EU50
Emission Unit Description: Stoker Fly Ash Transport
Raw Material/Fuel: Fly Ash
Rated Capacity: 15 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
IDNR Construction Permit 79-A-023

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP51

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU51
Emissions Control Equipment ID Number: CE51
Emissions Control Equipment Description: Pulse Jet Baghouse

Emission Unit vented through this Emission Point: EU51
Emission Unit Description: Stoker Fly Ash Silo Vent
Raw Material/Fuel: Fly Ash
Rated Capacity: 15 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP52

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU52
Emissions Control Equipment ID Number: CE52
Emissions Control Equipment Description: Rotary Wet Unloader

Emission Unit vented through this Emission Point: EU52
Emission Unit Description: Truck Loading – Wet Stoker Fly Ash
Raw Material/Fuel: Fly ash
Rated Capacity: 15 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust
Emission Limit(s): See Plant Wide Conditions
Authority for Requirement: 567 IAC 23.3(2)"c"

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP53

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU53
Emissions Control Equipment ID Number: CE53
Emissions Control Equipment Description: Pulse Jet Filter Cartridge

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Emission Unit vented through this Emission Point: EU53
Emission Unit Description: Truck Loading – Dry Stoker Fly Ash
Raw Material/Fuel: Fly Ash
Rated Capacity: 15 Tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 5%

Authority for Requirement: IDNR Construction Permit 96-A-1261

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
IDNR Construction Permit 96-A-1261

Pollutant: PM_{10}
Emission Limit(s): 0.1 lb/hr
Authority for Requirement: IDNR construction Permit 96-A-1261

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Recordkeeping
The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. Opacity shall be observed on a weekly basis to ensure no visible emissions during the material handling operation of the unit. If visible emissions are observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight

hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If al observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 27
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 1,000
Exhaust Temperature (°F): 100
Discharge Style: Horizontal
Authority for Requirement: IDNR Construction Permit 96-A-1261

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP68

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU68
Emissions Control Equipment ID Number: CE68
Emissions Control Equipment Description: Mixed water with ash in paddle mixer

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Emission Unit vented through this Emission Point: EU68
Emission Unit Description: Truck Loading – Wet Stoker Bottom Ash
Raw Material/Fuel: Ash
Rated Capacity: 75 tons/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[1]
Authority for Requirement: IDNR construction Permit 02-A-498
567 IAC 23.3(2)"d"

[1] An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.6 lb/hr
0.1 gr/dscf
Authority for Requirement: IDNR construction Permit 02-A-498
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit(s): 3.0 lb/hr[2]
Authority for Requirement: IDNR Construction Permit 02-A-498

[2] Limits set to maintain the project as a synthetic minor for PSD purposes.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput

1. The operation of this unit shall not exceed a maximum of 4380 hours per continuous twelve (12) month period, rolled monthly.

Authority for Requirement: IDNR Construction Permit 02-A-498

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. At the end of each month, the total number of hours this unit has operated over the previous month shall be recorded.
2. At the end of each month, the total number of hours this unit has operated over the previous twelve (12) month period shall be recorded.

Authority for Requirement: IDNR Construction Permit 02-A-498

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 12" x 30"
Exhaust Flow Rate (scfm): N/A (gravity discharge - truck loading unit)
Exhaust Temperature (°F): Ambient (68)
Discharge Style: Downward
Authority for Requirement: IDNR Construction Permit 02-A-498

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP80

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU80
Emissions Control Equipment ID Number: CE80A and CE80B
Emissions Control Equipment Description: Centrifugal Separator and Baghouse

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Emission Unit vented through this Emission Point: EU80
Emission Unit Description: Central Vacuum System
Raw Material/Fuel: Dust
Rated Capacity: 350 scfm

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[1]
Authority for Requirement: 567 IAC 23.3(2)"d"
IDNR Construction Permit 99-A-853

[1] An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Mater (PM)
Emission Limit(s): 0.1 gr./dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
IDNR Construction Permit 99-A-853

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput

1. Maintain Primary CE80A (High Efficiency Cyclone) and Secondary Separator CE 80B (Fabric Filter) according to manufacturer specifications and maintenance schedule.

Authority for Requirement: IDNR Construction Permit 99-A-853

Reporting & Recordkeeping
The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. Record on a monthly basis all maintenance (if any) of Primary CE80A and Secondary CE80B

Authority for Requirement: IDNR Construction Permit 99-A-853

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 6 ½
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 350
Exhaust Temperature (°F): Ambient
Discharge Style: Downward
Authority for Requirement: IDNR Construction Permit 99-A-853

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP90

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU90
Emissions Control Equipment ID Number: CE90
Emissions Control Equipment Description: Water Spray

Emission Unit vented through this Emission Point: EU90
Emission Unit Description: Vehicle Traffic (Fugitive)
Raw Material/Fuel: Road Dust
Rated Capacity: 3,534 miles/yr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No visible emissions at the property line
Authority for Requirement: IDNR Permit December 8, 1986

Pollutant: Particulate Matter (PM)
Emission Limit(s): 11.76 Tons/yr
Authority for Requirement: IDNR Permit December 8, 1986

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP100

Associated Equipment

Associated Emissions Unit ID Numbers (if multiple units vent thru this EP): EU100
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: None

Emission Unit vented through this Emission Point: EU100
Emission Unit Description: Portable Diesel Generator
Raw Material/Fuel: Diesel
Rated Capacity: 20.8 gal/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[1]
Authority for Requirement: IDNR Construction Permit 99-A-732
567 IAC 23.3(2)"d"

[1] An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
IDNR Construction Permit 99-A-732

Pollutant: Nitrogen Dioxide (NOx)
Emission Limit(s): 39.4 tons/yr[2]
Authority for Requirement: IDNR Construction Permit 99-A-732

[2] Required to keep below PSD significance levels.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process Throughput

1. The diesel generator shall use #1 or #2 diesel fuel only.
2. The diesel generator shall be limited to 125,000 gallons of fuel per twelve month period rolled monthly.
3. The diesel fuel shall have a sulfur content not to exceed 0.5 % by weight.

Authority for Requirement: IDNR construction Permit 99-A-732

Reporting & Recordkeeping

The following records shall be maintained on site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

1. The type of diesel used.
2. The quantity of diesel fuel used per twelve month period rolled monthly.
3. The sulfur content of the diesel fuel.

Authority for Requirement: 99-A-732

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 11
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 2,103
Exhaust Temperature (°F): 903
Authority for Requirement: IDNR Construction Permit 99-A-732

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 22.108(3)

General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in

accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
    a. Form 1.0 "Facility Identification";
    b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
    c. Form 5.0 "Title V annual emissions summary/fee"; and
    d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
    a. Form 1.0 "Facility Identification";
    b. Form 5.0 "Title V annual emissions summary/fee";
    c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
ii. The estimated quantity of the excess emission.
iii. The time and expected duration of the excess emission.
iv. The cause of the excess emission.
v. The steps being taken to remedy the excess emission.
vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
ii. The estimated quantity of the excess emission.
iii. The time and duration of the excess emission.
iv. The cause of the excess emission.
v. The steps that were taken to remedy and to prevent the recurrence of the

incident of excess emission.
vi. The steps that were taken to limit the excess emission.
vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
b. The facility at the time was being properly operated;
c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under

section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
d. The changes are not subject to any requirement under Title IV of the Act.
e. The changes comply with all applicable requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that is required to do any of the following:

i. Correct typographical errors
ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the

source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:

i. Do not violate any applicable requirements

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.

iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification.

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.

ii. The permittee's suggested draft permit

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee

need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. *567 IAC 22.111-567 IAC 22.113* The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations, training fires and controlled burning of a demolished building. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 <u>except</u> 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a

class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as

practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
    a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
    b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
    c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
    d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing,

continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.
Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes
The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.
Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000